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The impact of the Russian-Ukrainian war on SMEs

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(Abstract) The paper summarizes the background and reasons of development of the Russian and Ukrainian war. At the time of German reunification, US and German leaders promised Gorbachev that if a united Germany could remain a member of the North Atlantic Treaty Organization, the NATO would not push an inch Eastward. However, between 1999 and 2020 Poland, the Czech Republic, Hungary, Bulgaria and later 10 Eastern-European countries joined the organization. Hereby the NATO disregarded the earlier promise and the Minsk Agreement. So, the current war did not start with Russia's attack on an independent and democratic Ukraine, but the war is the end of a long process in which Russia has been backing away from the expanding NATO. Up to the end of December 2024 Ukraine got USD 135 bn military aid including 69 bn aid from the USA and USD 66 bn from the European Union. President Trump estimates that Russia and Ukraine have lost nearly 1.1 million troops, according to January 2025. There is no reliable information on the SME sectors in Russia and Ukraine. International organizations like UNDP, ILO, OECD, EIB and EC are making evaluation only on the Ukrainian possible situation. The Ministry and Economy of Ukraine and the Ministry of Economic development of the Russian Federation provide basic statistics on SMEs. My direct contacts with ERENET Members in both sides update the SME sectors. In Ukraine 99,8% of all enterprises are SMEs, which accounted for 63% of the total business employment and generated 49% of the total value added. The number of Ukrainian SMEs dropped by 71,000 (14%) but started to recover within the last 5 years. After two years of full-scale war, a majority of Ukrainian small and medium-sized enterprises (SMEs) have managed to stabilize their operations, demonstrating remarkable adaptivity to wartime conditions. The Ukrainian Government approved the Strategy for the Development and Digital Transformation of SMEs until 2027 & Action Plan for 2024-2027 on 30 August 2024. In Russia the number of SMEs in 2023 was 6.35 million units, that exceeded the pre-crisis level of 2019 (5.92 million units). There are 33.2 million small businesses which is 99.9% of the total number of companies. Small businesses make up the vast majority of Russian companies. From 1995 to 2021, small businesses created 17.3 million new jobs. Small businesses have created more jobs than large companies, accounting for nearly 63% of employment growth since 1995.Micro-enterprises with four or fewer employees make up 56% of the total number of small businesses in Russia. According to the evaluation of College of London, Goethe University and University of Bergamo Russia had lost 1.4 million SMEs (42%) five years into the conflict. The OECD EU4 Business studies research analyzed the major problems what small businesses face. The study also outlined the major demands what SMEs need. The military conflict between Russia and Ukraine has created a challenging environment for SMEs in both countries, marked by economic sanctions in Russia, supply chain disruptions, and rising costs. However, the resilience and adaptability demonstrated by many businesses highlight the potential for recovery and growth in the future. There are no winners in the war, only losers. The task of the international community is to create peace!

The position of European countries regarding opportunities for Industrial Symbiosis: A comparative analysis employing multi-criteria decision-making tools

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(Abstract) The Circular Economy is recognized as a significant model of sustainable development that enables waste reduction, more efficient use of resources and climate neutrality. Considering that the estimates indicate that the planet Earth's resources and biodiversity are expiring, the European Union invests constant efforts to foster the transition towards regenerative business models and create opportunities for consumption within the planetary boundaries. Production industries are identified as particularly significant resource consumers. Therefore, special attention is directed to the feasibility of collaborative business models and the application of digital technologies to address resource depletion and negative environmental impacts. The concept of the Circular Economy has

become crucial in global efforts to reduce the ecological footprint and transition to a green economy, especially through the concept of Industrial Symbiosis. Through Industrial Symbiosis, companies from different sectors combine their waste and by-products, considering them as raw materials, thus optimizing energy consumption, decreasing primary resource consumption and reducing harmful gas emissions. Although the EU's efforts are evident and clear targets have been established through the European Green Deal, it is essential to monitor and analyze regional results for European countries to effectively develop their potential, define strategies, and implement plans that transform material consumption and environmental impact modalities. Therefore, understanding the material and value chains and processes is crucial to reaching the potential and establishing adequate frameworks to facilitate the implementation of Industrial Symbiosis. In this sense, this study aims to analyze the potential of Industrial Symbiosis in EU countries. Multi-criteria decision-making tools have been used for this purpose. The data used in the analysis were obtained from the Eurostat database. The results highlight a significant divide between EU member states in terms of opportunities and eagerness to implement Industrial Symbiosis. The results indicate the need to focus attention on targeted policies to strengthen institutions and companies to analyze the applicability of collaborative business models and integrate Industrial Symbiosis at local, regional, and global levels.

Stress Relief Exercises

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(Abstract) In March 2022 Jamais Cascio - author and global thinker-created the "BANI" model. This acronym states for: Brittle, Anxious, Non-linear, Incomprehensible. These words remind us that in our days many changes are not only surprising, but sometimes completely disorienting. All this have strong influence on our mental and physical health. We hear it from everywhere: "live an organized life, eat well, get enough sleep..." and "don't get nervous"... The real question is: What can we do to reduce our stress level immediately? There are several different methods. In this brief overview, we will only highlight three simple exercises.

"Vanishing" pax Americana as the current rational choice for the United States

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(Abstract) We discuss recent global policy elements of the USA, themselves as they are, and highlight valid and rational motivations. In the core, we identify rational strategic elements in the wake of the sustainability crisis of the 21st century. The US as the sole superpower aims at saving or even strengthening its position during the crisis; and instead of a higher level of cooperation in optimistic (globally community-optimal) scenarios, highly competitive actions are trivially much safer and more beneficial for an individual (strong) actor in the crisis. There are similarly rational but unconventional elements of US global diplomacy. The world order of the recent half century (the 'pax Americana'), may seem to be being destroyed by its definitive power; but these steps can be also seen as unconventional countermeasures against losing power, as well as preparing for the hardly foreseeable (cataclysmic) movements during the onset of the new era after the sustainability breakdown.

Readiness Factors for Lean Implementation - A Systematic Literature Review

Matilda Kapaj

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(Abstract) Purpose: Companies have progressively recognized the strategic significance of lean philosophy and the opportunity to cultivate a competitive advantage through meticulous lean implementation. Nevertheless, some firms have had difficulties in implementing and maintaining lean practices. This paper aims to explore this opportunity through a systematic review of lean literature pertaining to the readiness factors (RFs) for lean adoption. The purpose of this research is to perform a comprehensive review to answer the following research question: What readiness factors (RFs) are important for an effective lean implementation? Research methodology: A systematic review of literature focusing on lean and lean readiness factors was conducted. Findings: Managerial commitment, organizational culture, communication, training, customer focus, supplier focus, strategic alignment, employee involvement and empowerment, teamwork, measurement, and resources are the most attributed readiness factors throughout lean literature. Research implications: The identified readiness factors are derived from a review of the existing published literature. The external validity of the findings could be improved through empirical testing. Practical implications: The discovered readiness factors will equip companies to be more prepared as they embark on their lean implementation journeys.

Developing a Model for an Integrated Tourism Product: A Critical Analysis of Approaches and Territorial Perspectives

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(Abstract) This study represents an attempt to analyze the scientific approaches used in tourism sciences concerning the integrated tourism product. Both international and domestic scientific studies on the concept of the integrated tourism product to date demonstrate a gap in research. Current works focus primarily on discussions about the evolution of the terminology of the tourism product and its structure, which are addressed similarly by various disciplines and in the theoretical framework. This raises the question of whether the integrated tourism product is a pure expression of the diversification of mixed forms of tourism or represents the development of the tourism product of the territory as a comprehensive offer. For this reason, the objective of this paper is to continue with the analysis and proposal of an integrated tourism product model that combines the diversification of forms of tourist mobility with a territorial approach, aiming at sustainable development and increased destination attractiveness. The methodology used in this paper involves critical literature analysis, logical operations, and heuristics. The outcome of the study is the creation of a structured model for an integrated tourism product. Although the work is theoretical in nature, the issues discussed are of a practical nature.

Keywords: Integrated tourism product, product diversification, territorial tourism product, model.

The effect of inflation on sustainable spending patterns

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(Abstract) Nowadays, there has been a marked increase in discourse pertaining to consumer awareness, encompassing terms such as environmental or health awareness. The current economic challenges have led to a marked decline in people's ability to remain cognizant of such issues. This article will examine the impact of inflation on consumer buying patterns. The analysis will employ current data sets to illustrate the shifts, comparing different countries. Utilizing extant research, it will be possible to see how certain habits have changed as a result of changes in prices.

The future of the European competitiveness in the light of the Hungarian interests

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(Abstract) Last September the so called Draghi Report was published under the title of "The Future of European Competitiveness". It summarized the most important challenges we together face in the forthcoming decades. As the report states "If Europe cannot become more productive, we will be forced to choose. We will not be able to become, at once, a leader in new technologies, a beacon of climate responsibility and an independent player on the world stage. We will not be able to finance our social model. We will have to scale back some, if not all, of our ambitions. This is an existential challenge." The Hungarian government was one of stakeholders who initiated that the EU should much more concentrate on the question of competitiveness. The author of this paper will analyze the most important statements of the Draghi Report, while trying to point out the potential differences in the common European and Hungarian interests

Valuation Methodologies of Ecosystem Services in Urban Areas with special focus on urban trees - a Review of Scientific Literature

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(Abstract) Sustainable urban forest management must consider urban green spaces (UGS) based ecosystem services (ES), especially trees. Key ES include air purification, carbon storage, heat island reduction, and mental well-being. Educating stakeholders fosters advocacy, helping preserve green spaces against development. We reviewed methodologies for valuing UGS-based ES, addressing monetization challenges and measurement approaches like remote sensing (ALS, TLS, satellite). Using PRISMA 2020guidelines, we analyzed Scopus studies (2010–2015) via SWOT analysis. Findings highlight research on energy-saving, health, and life-satisfaction benefits, but gaps remain in monetizing mental health, crime reduction, and tourism benefits. Advances like carbon and biodiversity credits show progress, yet standardized tools are needed. This study contributes to understand ecosystem service valuation and its integration into urban forestry policy and practice.

Long-term deviations from output trends: a VAR approach

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(Abstract) In light of the current paradigm shifts in fiscal and monetary policy making in the direction of sustainability, the question of efficient anti cyclical interventions cannot be left unaddressed. CEE economies have undergone a significant rise in the price level paired with a deterioration in living standards. By common consensus, part of the blame is on inefficient monetary and fiscal policy conducted on neoclassical theory. This study builds on Summers' and Blanchard's observation of hysteresis in the economy. As a Keynesian concept, the use of DSGE models is not appropriate. In this study I employ a data-driven approach. Using IRFs, FEVD on a 6-variable VAR model I determine the effects of fiscal policy shocks on autonomous consumption. Multi-period government underinvestment in times of persistently falling long-term demand may deter the economy from its long term potential output. Key words: anti cyclical fiscal policy, potential output, sustainable spending, VAR model

The Impact of AI-Driven Demand Forecasting Technologies on Enterprises

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(Abstract) With the rapid advancement of artificial intelligence (AI) technology, significant technological transformations have been introduced to enterprise supply chain management. This study explores the transformative potential of artificial intelligence AI-driven demand forecasting technologies in enterprise supply chain management. Through quantitative evaluation methods, such as regression analysis and time series analysis, the research compares traditional statistical methods with advanced AI-driven forecasting models, aiming to reveal how AI can enhance an enterprise's competitive advantage. The findings are expected to provide valuable insights for the strategic integration of AI technologies, thereby improving decision-making processes and operational efficiency in supply chain management.

Tourism actors' perceptions of responsible tourism practices: Analysis based on a literature review

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(Abstract) Sustainable tourism (ST) is increasingly recognized as vital for the long-term development of destinations, with shared responsibility among all tourism actors. Responsible tourism practices (RTP) are the practical expressions of this vision, enabling the implementation of ST principles. While the importance of RTP is well acknowledged, there remains a notable gap in the academic literature regarding how different tourism actors perceive these practices.

This study aims to provide a comprehensive and focused literature review of empirical studies published between 2020 and 2024, examining the perceptions of various tourism actors toward RTP. The primary objectives are to assess tourism actors attitudes, identify gaps in the current research, and derivate a future research agenda. The Scopus database was utilized to extract relevant empirical studies, with clearly defined inclusion criteria and a rigorous evaluation process ensuring the relevance and quality of the selected literature. Findings reveal that tourists view RTP as enhancing travel authenticity, ethical engagement, and enjoyment, contributing to repeat visitation and responsible behavior. Tourism businesses, particularly smaller firms, demonstrate uneven awareness of RTP; however, many recognize the benefits of RTP for competitiveness, employee well-being, and community relations. Communities

increasingly appreciate RTP, associating them with improved quality of life and sustainability, with perceptions shaped by the inclusiveness and authenticity of implementation. Notably, there is a lack of empirical research on government perspectives regarding RTP.

This review contributes to bridging knowledge gaps in RT research. It supports future academic inquiries and informs policymakers and tourism practitioners in designing more effective, inclusive, and strategic approaches to promoting responsible tourism and achieving sustainable development goals.

Keywords: sustainable tourism, responsible tourism, responsible tourism practices, tourism actors, literature review.

AI vs. Human Hosts: A Comparative Study on Fatigue Resistance and Audience Retention in Live-streaming E-commerce

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(Abstract) With the advancement of 5G network technology and artificial intelligence, live streaming has become one of the increasingly important channels in the e-commerce field, including not only live streaming by human streamers but also live streaming by AI streamers. This study compares the dynamics of AI-powered and human streamers in live-streaming e-commerce, with an emphasis on audience retention patterns, fatigue resilience, and algorithmic interactions. The study presents a multi-dimensional approach to assessing streamers' endurance and viewer engagement sustainability based on a novel analytical framework involving temporal decay curves, fatigue criticality thresholds, and platform algorithm responsiveness. The study examines how the operational stability of AI streamers and human streamers' adaptive capabilities affect long-tail audience retention and algorithmic visibility through observational data capturing real-time viewership metrics and platform-level interventions. The framework presents the idea of "algorithmic acclimation" to quantify platform-driven traffic compensation mechanisms triggered by consistent performance metrics. Preliminary results reveal that AI and human streamers have different resilience characteristics, affecting content strategy optimization and algorithmic fairness. By developing a fatigueinclusive evaluation model, this study advances our understanding of human-AI coexistence in digital retail ecosystems while also providing organizations with strategic insights for streamer deployment.

The Role of Corporate Social Responsibility in Achieving Economic and Social Sustainability

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(Abstract) Corporate Social Responsibility (CSR) has become a pivotal strategy for businesses to address global challenges and promote sustainable development. This study examines the role of CSR in achieving economic and social sustainability by analyzing its impact on corporate performance, social equity, and environmental preservation. Through a literature review and qualitative analysis, the research finds that CSR initiatives align well with the United Nations Sustainable Development Goals (SDGs). The results indicate that CSR not only enhances corporate reputation and stakeholder trust but also fosters long-term economic growth while addressing social and environmental issues. However, the effectiveness of CSR depends on its integration into core business strategies and genuine commitment to sustainability. This study concludes that CSR is a vital tool for balancing economic and social sustainability, but its implementation requires robust governance and stakeholder engagement.

Globalization of European Union countries in the context of global turbulence and geopolitical shift in the 2020s

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(Abstract) Globalization of EU countries in the context of global instability and shift was studied. Analysis with the use of KOF globalization index confirmed hypothesis assuming that EU countries represent a relatively high level of globalization, but there are still large differences between new and old EU members. Globalization does not solve world economy's problems, and may even induce new global challenges and threats. Turbulence in the 2020s raises questions about further development of international relations and globalization. Disrupted international cooperation and disturbed geopolitical balance, may limit, inhibit or change globalization. Exacerbation of tensions between global powers may lead to the division of the world into competing platforms. Geopolitical shift becomes particularly important. The hypothesis assuming that instability in the global economy affects the prospects of globalization, including the globalization of EU countries, has been positively verified.

Literature Review on Access to Finance and Support Networks in the Development of Women's Entrepreneurship in Kosovo

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(Abstract) Women's entrepreneurship plays a crucial role in economic development and social empowerment; however, female entrepreneurs often face significant challenges in securing financial resources and building support networks. This paper provides a literature review on the impact of access to finance and support networks on the development of women's entrepreneurship in Kosovo. Through an analysis of studies from countries with varying levels of economic development and Kosovo's specific context, key challenges and best practices are identified to help female entrepreneurs overcome financial barriers and establish effective support structures. The study highlights that dedicated financing schemes for women entrepreneurs, mentoring programs, and professional networking platforms are key factors for their success. However, the literature suggests that these mechanisms are often fragmented and limited by the absence of comprehensive approaches addressing gender and structural challenges. Additionally, the lack of data on the long-term effectiveness of these initiatives poses a barrier to the development of well-structured policies in Kosovo.

This paper contributes to the existing literature by analyzing the key factors influencing access to finance and the establishment of support networks for female entrepreneurs in Kosovo. Furthermore, it offers recommendations for improving financial access and strengthening support networks, thereby fostering a more enabling environment for the development of women's entrepreneurship in Kosovo.

Keywords: Women's entrepreneurship, access to finance, support networks, mentoring, economic development, gender equality.

Blockchain-Based Transportation IT Solutions in Supply Management

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(Abstract) Thanks to the Intelligent Transport System, transportation has become more efficient these days. With available traffic information and 5G technology, cars can effectively transmit relevant information to other road users, such as congestion, environmental forecasting, and accidents. This information is vital to designing a fast and efficient means of transport. However, many people do not participate in the sharing of information, even depending on the possibility, because this means that a lot of personal information about the car and its owner must be provided. The information systems used so far could not solve these problems. However, in the case of vehicles authenticated in the blockchain, the personal data of the car owner will remain secret and will not be made public. Due to decentralization, trust is based on blockchain technology and not on personal and sensitive data. To this end, the research goal is to create a blockchain where ITS data can be safely stored. Since the registration data can be efficiently saved in the blockchain, a smart contract is created without any special knowledge of its use by the end user. A smart contract always requires a simple registration, which is recorded in the contract. The data specified in the contract are automatically saved in the blockchain, avoiding all "traditional" centralized data storage solutions, thereby increasing the safe storage of data.

Increasing Financial Literacy Among University Students in Terms of Teaching Bitcoin and Cryptocurrencies

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(Abstract) Increasing financial literacy among university students is crucial, as in many cases, this debt burden and inappropriate spending impose a serious burden on households. A new approach to this could be cryptocurrency-based education. The research aims to shed light on the need to examine several factors before investing. When investing in cryptocurrency, choosing the right cryptocurrency can be crucial, as a bad investment exposes the invested capital to serious risk, and even then, the constantly changing market conditions have not been considered. For this reason, the research will develop what approach would be appropriate to teach the subject in certain majors, taking into account student interest. These can be: IT, economics, mathematics, or legal approaches. This would allow students to decide on the most optimal investments based on their individual preferences, while also becoming familiar with the given blockchain and its inherent possibilities.

Blockchain vs. Centralized Ledgers in CBDCs: A comparative analysis of efficiency, scalability, and security.

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(Abstract) The world financial scene is changing as a result of the Central Bank Digital Currencies (CBDCs) quick development and growing acceptance. The efficiency, scalability, security, and operational resilience of centralized ledger and blockchain-based systems are compared in this article in the context of CBDCs. The study examines the scalability of four top CBDC systems under various transaction loads and measures important performance indicators like transaction throughput, latency, and system usage. The analysis also looks at possible security flaws like double-spending and takes into account crucial elements like energy usage, privacy issues, fault tolerance, and network disruption resilience. The results illuminate the trade-offs between decentralization and centralized control and offer a thorough grasp of the benefits and drawbacks of blockchain and centralized ledger architectures. This study offers guidelines for the future development and application of CBDCs across various financial ecosystems and provides insightful information about the difficulties in implementing them at scale.

Strengthening the Position of Albanian Farmers in the Dairy Value Chain in Light of the EU Common Agricultural Policy (CAP)

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(Abstract) Abstract This article analyzes the position of Albanian dairy farmers within the value chain by assessing their power in price negotiations, access to markets, and integration with processors and retailers. Using the framework of the EU Common Agricultural Policy (CAP), which aims to strengthen farmers' positions in the value chain, the study evaluates how Albanian dairy farmers align with these objectives and identifies key challenges. The analysis highlights structural weaknesses, such as fragmented production, weak bargaining power, and limited access to financial and technological resources, which hinder competitiveness. The study aims to identify ways to empower farmers within the dairy value chain by leveraging policies and programs provided by the European Union, particularly the "Farm to Fork" Strategy. Through a comprehensive approach implemented in the framework of the project ""Farm to Fork Academy for Green Western Balkan-our common European future" financed by EU, involving focus group discussions, interviews with key stakeholders, and secondary data analysis, the study provides an in-depth assessment of the current state of the sector and the positioning of farmers within the value chain. Furthermore, it offers concrete recommendations to enhance farmer cooperation, improve quality standards, and implement fair trading mechanisms. The study suggests that government and international partners should support investments in infrastructure and technology, including the establishment of milk collection centers and advanced dairy farm equipment. Additionally, fostering farmer cooperatives would strengthen their bargaining power and improve access to financing and markets. If the right policies are implemented with full support from the EU and national stakeholders, the dairy sector has the potential to increase rural incomes, enhance the quality of life in rural areas, and contribute to overall economic development. Recommendations focus on policies that could enhance farmers' roles in the value chain, including cooperatives, improved market access, and better financial instruments. Key words: agriculture, value chain, CAP, Albania

Cybersecurity policy for a sustainable circular bioeconomy: An overview

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(Abstract) sustainable circular bioeconomy includes Α interconnected complex supply chains in which data is shared with various stakeholders such as manufacturers, farmers, and researchers. It also relies on sensitive data acquisition via IoT sensors, posing unique cybersecurity risks. This study offers an overview of the cybersecurity threat landscape in a sustainable circular bioeconomy. It assesses cybersecurity policies addressing the risks interconnectedness, data sensitivity, operational technology vulnerabilities, and emergent technologies. It analyzes critical elements such as data governance, operational technology security, end-to-end supply chain data protection, incident response, recovery, training, and awareness. Furthermore, it proposes a holistic approach comprising the integration of sustainability initiatives into cybersecurity operations.

Harvesting Intelligence: A Conceptual AI Framework for Precision Irrigation

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(Abstract) Efficient water resource management is paramount for sustainable agriculture amidst increasing global population and climate variability. This paper establishes a novel theoretical framework for an AI driven Decision Support System (DSS) specifically designed to enhance precision irrigation practices. The primary aim of this investigation is to leverage this framework to develop a deep learning AI model capable of accurately predicting and precisely detecting water stress sections within crops of interest, thereby enabling highly targeted and efficient water application. The proposed framework integrates multiple heterogeneous data sources to construct a comprehensive spatio-temporal understanding of crop water status. This includes Earth Observation (EO) data from Sentinel-2 B satellites, specifically utilizing vegetation indices such as Normalized Difference Vegetation Index (NDVI) for assessing vegetation health and Normalized Difference Moisture Index (NDMI) for soil water content. Complementing this, high-resolution in-situ measurements are collected by IoT sensors (e.g., IoT-NPK for soil moisture, NPK levels, temperature, and pH) mounted on mobile robot platforms like PlatypOUs, providing essential ground truth validation. Furthermore, meteorological data i.e. precipitation, air and soil humidity is integrated to provide crucial environmental context and predictive insights. This paper outlines a methodology for developing a Recurrent Neural Network (RNN) architecture, based on a U-Net topology, that will effectively encode features from these integrated data streams. The model incorporates multiple convolution layers for efficient spatial feature extraction, Long Short-Term Memory (LSTM) layers to capture temporal dependencies, and attention layers to focus on the most critical features for prediction. The ultimate output is a newly generated image representing the predicted spatial distribution of water stress across the field of interest, allowing pixel-based classification for targeted irrigation recommendations. This foundational investigation, including initial data analysis and feature engineering, paves the way towards optimized water use, contributing significantly to improved agricultural productivity and enhanced resource conservation. Future research will focus on the rigorous development, training, and validation of this advanced AI model.

Keywords: Water sustainability, Precision Farming, Artificial Intelligence, Human operator support, Mobile Robot Platforms, IoT.

Application of the circular economy with agricultural waste. Case study: banana leaves and poplar chop

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(Abstract) Agricultural waste has a negative impact on the environment, the economy, and society as a whole. Implementing sustainable agriculture practices that prioritize resource recovery and waste reduction is one way to try to lessen the problems. For instance, turning agricultural waste into biochar can improve soil health, cut down on waste, and lessen the need for chemical fertilizers. In the present research, two kind of agricultural waste were used to produce biochar, the material was characterized, used as an adsorbent for ammonium ions and phosphates ions removal in aqueous solutions and finally recovered for reuse as fertilizer. Results show that biochar is an economic and environmental-friendly option for removal ammonium and phosphates ions from aqueous solution achieving an adsorption capacity of 7mg NH4+/g and 25.5mg PO43-/g; and the application of biochar enriched in the soil, enhance nutrient availability for germination and in the improved in 54% the growth of the plants.

The third missions of higher education institutes and their possible impacts

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(Abstract) The object of this study is to clarify the definition of the third mission of higher education institutes with presenting this type of actions, furthermore, describing their possible impacts simultaneously. The paper does not aim to provide a full literature review of third mission activities. It is an important task to provide an insight into the evolving of the examined topic as well as outlining development directions and best practises for the higher education institutes through the reviewed literature between 2020 and 2024. The literature review ensures the theoretical framework in which the third missions of the higher education institutes can be understood, and its scope of activities be known with finding its relevance.

Keywords: third mission, higher education institute, university

Asian Economy Development in 3th Yearthousend

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(Abstract) The 3th Yearthousend is the period of change. The new international association, BRICS, is also a sigh of the fresh wind. The main international trade volumen turn from Atlantic area to the Pacific. New regions increased, special in Asia. This paper will be analyze the main Asian countries development in the last two decades.

Unlocking Food Security: The Power of Labeling in Consumer Trust and Safety

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(Abstract) Food labels are a bridge between consumers and the food system, enabling consumers to access essential product information and supporting food safety and food security. Their effectiveness is increasingly influenced by the transparency and reliability of food labelling. This review aims to evaluate the role of food labelling in promoting food safety and security by enhancing consumer trust. To investigate this relationship, the scientific literature is synthesized published between 2014 and 2024 on the link between food labelling, food safety and food security. Findings suggest that improved food labelling enhances consumers' access to reliable and accurate product information, by facilitating informed food choices, thereby contributing to reduced food insecurity. Trust in food labels is shaped by institutional credibility, label readability, and individual motivation, highlighting the importance of tailored communication. Furthermore, the adoption of digital food labelling systems and certification mechanisms can improve food safety outcomes and enhance consumer trust.

Coaching Generation Z in higher education for enhanced self-awareness and conscious choices

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(Abstract) This study explores how coaching can support Generation Z in developing their self emotions, and making conscious life and career decisions. It examines the motivational factors influencing their choices and how coaching enhances self-awareness and decision-making in higher education. The research aims to highlight the importance of the topic and reveal potential solutions for universities to foster informed life planning and career success.

Keywords: Generation Z, consciousness, coaching, education



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The problems of health care financing and the financing of family medicine

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(Abstract) Funding amounts for health care have not changed for more than 10 years. Meanwhile, prices have risen significantly, creating a gap between funding and actual costs. Literature and statistics are used to illustrate these problems and gaps. The results show that it is necessary to revise these amounts in order to adapt the financing system to reflect the real costs. The study gives government policy makers and doctors an insight into what the problems are and what the solutions might be.

The evolution of Hungarian exports and imports in the 21st century

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(Abstract) Hungary had a very high competitiveness in agricultural and food products at the time of the regime change (1989). This has declined sharply and imports have taken the place of self-sufficiency in products. The study presents the evolution of export and import competitiveness over the last decades based on data from the WITS database. Calculating competitiveness indices using the Balassa index. We can see that the competitiveness of Hungarian products has declined sharply. Today, we can hardly find any product that is still competitive. And imports have become stronger. The study shows the current trends and possible directions of development for decision-makers.

Keywords: Competitiveness, Balassa index, Hungarian export and import.

Tracing the development of platform economy research: key trends and insights

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(Abstract) In recent years, the platform economy has transformed how individuals share and conduct transactions in digital spaces. This phenomenon has attracted scholars from various diverse fields and disciplines into an emerging research area. This study aims to explore the trends and key insights in the literature on the platform economy through a bibliometric approach. The analysis includes research articles published between 2000 and 2024 on the platform economy. Using publications available on the Web of Science, this study identifies influential journals, institutions, landmark papers, and citation bursts. In addition to researchers in management, business, and economics, scholars from sociology, communication, law, and computer science are increasingly contributing to platform economy research. The findings reveal that the focus of platform research has evolved over time. This research will serve as a basis for future discussions on the crucial roles played by digital platforms in the platform economy.

Keywords: Platform economy, Scientific research, Bibliometric analysis

Resilience through Business Model Innovation: Navigating uncertainty in E-Commerce

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(Abstract) In an era of rapid technological advancement and economic volatility, e-commerce firms must continuously evolve their business models to ensure resilience and long-term success. This study examines the role of Business Model Innovation (BMI) in fostering adaptability amid global disruptions, such as shifting expectations, regulatory changes, and consumer digital transformation. By employing a qualitative research approach, including expert insights and case analysis, the study identifies key enablers of resilient business models, such as platform-based ecosystems, data-driven personalization, and AI-driven automation. The findings highlight how strategic agility and innovation-driven business models enable firms to mitigate risks while capturing new opportunities. This research contributes to the ongoing discourse on e-commerce strategy, offering a roadmap for businesses seeking to enhance flexibility and sustain competitive advantage in an unpredictable digital landscape.

Keywords: Business Model Innovation, E-Commerce, Digital

Transformation, Strategic Agility, Resilience

From Desire to Loyalty: Building Destination Loyalty through the Example of Sárvár

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(Abstract) Tourism marketing's key component is enhancing the competitiveness of destinations, which can be achieved through effective communication tools. As consumer decisions in the tourism industry are often based on emotional factors, building a destination's image and developing an appropriate marketing strategy are crucial. Sárvár, as a prominent health tourism destination, heavily relies on experience-based marketing, highlighting the therapeutic effects of thermal water and the available relaxation opportunities. What factors contribute to Sárvár's tourism success? What strategies and methods can be applied to turn potential visitors into returning tourists? What opportunities do online marketing tools and mobile applications offer in tourism, and how do they influence consumer behavior? In this publication, I answer these questions by examining Sárvár's marketing communication tools through the AISDALSLove model, which is a more recent version of the widely-known AIDA model. The AISDALSLove model is a marketing communication framework that analyzes consumer behavior and decision-making processes in seven steps. These steps are closely interconnected and aim to gradually build consumer commitment and loyalty. I hope that my analysis will contribute to Sárvár's future marketing communication activities and serve as a good example for other cities.

Exploring the Influence of ESG Factors on Fixed Gross Capital Formation in the Western Balkans

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(Abstract) In recent years, Environmental, Social, and Governance (ESG) factors have emerged as key determinants of investment decisions globally. While much focus has been placed on the role of ESG in attracting Foreign Direct Investment (FDI), its impact on Fixed Gross Capital Formation (FGCF) a critical measure of domestic investment—remains underexplored, particularly in emerging economies. This study investigates the relationship between ESG indicators and domestic investment in the Western Balkans (Albania. Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia) over the period 2000-2023. Using a panel data econometric approach, the research analyzes how variations in environmental, social, and governance factors influence domestic capital formation. Key variables include CO2 emissions per capita, renewable energy adoption rates, Human Development Index (HDI), unemployment rates, corruption perception indices, and government effectiveness scores. The study also controls macroeconomic factors such as GDP growth, inflation, and interest rates. The findings reveal that governance indicators, particularly institutional quality and anticorruption measures have the most significant positive impact on domestic investment. Social factors, such as workforce education levels and social stability, also play a crucial role in fostering a favorable investment environment. Meanwhile, environmental policies show a moderate but growing influence, especially in sectors aligned with green energy and sustainable infrastructure. The study highlights the need for policy reforms aimed at improving ESG performance to stimulate domestic investments. Recommendations include strengthening environmental regulations, investing in human capital development, and enhancing governance transparency. By integrating ESG considerations into national development strategies, Western Balkan countries can create a more resilient and attractive climate for domestic investors, fostering long-term economic growth and sustainability.

Keywords: ESG Indicators, Fixed Gross Capital Formation (FGCF), Domestic Investment, Sustainable Development, Western Balkans

The impact of coping skills in post-traumatic growth of healthcare providers: When mental health is deteriorating due to Covid-19 pandemic

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(Abstract) Frontline healthcare providers are consistently exposed to potentially traumatic events while assisting patients with Covid-19. Post-traumatic growth (PTG) happens when a person can transform trauma and use adversity in one's advantage. In response to limited studies on positive outcomes that may occur from the pandemic; this study aimed to elucidate the positive impact of coping with COVID-

19 outbreak on mental health, such as PTG. The study comprised a sample of 691 healthcare providers 59% female, including physicians (n = 138) and nurses (n = 550), working in public health facilities in Kosovo, with an average age of 41.6 years (SD = 10.79). They were asked to complete a questionnaire with four parts: Sociodemographic, GHO - 28, COPE and PTGI. A deterioration of mental health with somatic symptoms leading to the escalation due to Covid-19 outbreak was found. Female healthcare providers reported more clinical symptoms as well as higher coping skills scores than men. The domains in which positive changes were most frequently observed were Relating to Others, New Possibilities and Personal Strength. There was no significant direct effect of mental health on PTG in the mediation model, though a significant indirect effect was observed for coping skills. The results suggest that levels of mental health exacerbation do not play a conclusive role in determining levels of PTG, as long coping mechanisms are in place. The development and implementation of interventions to minimize Covid-19-related mental health consequences, by fostering PTG among healthcare providers could be highly beneficial in pandemic response work.

Social Initiatives in Support of the State: A Mechanism for Enhancing Societal Resilience and Development

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(Abstract) Individual states are generally expected to protect and care for their citizens by creating and enforcing laws, supporting various underprivileged groups in society, and so on. However, governments often fail to provide sufficient and timely attention to different vulnerable groups, to resolve urgent social issues quickly, and to effectively address serious challenges in this critical area. This is where individuals, community groups, and organizations step in, supporting and complementing governmental efforts through volunteer or entrepreneurial initiatives – sometimes even taking over certain social functions traditionally performed by state institutions. This paper analyzes these processes and highlights good examples of two young people whose ideas and actions aim to solve specific social problems in Bulgaria. Such initiatives foster civic responsibility, promote cohesion, and contribute to sustainable development.

Country Level Factors Influencing Environmental, Social, and Governance (ESG) Risk in the Energy Services Industry – An Empirical Study

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(Abstract) Different companies listed on stock exchanges are declaring their non-financial reports alongside their financial statements, aiming to provide more detailed and substantial information on environmental, social, and governance (ESG) issues. Based on this, the risk associated with these three dimensions is also assessed. This paper examines the possible effect of certain institutional factors—such as political, economic, social, educational, and technological aspects—on the ESG risk of companies operating in the energy services industry. The results indicate that some macroeconomic factors of a country, such as legal regulations for employee protection, competitiveness, market concentration of firms, the human development index, and the percentage of GDP spent on research and development, influence the quality of non-financial reporting and ESG risk. This implies that companies operating or headquartered in countries or regions with more favorable institutional factors tend to exhibit a better approach to environmental, social, and governance issues, resulting in lower ESG risk.

Keywords: ESG risk, institutional factor, energy service industry

The EU's energy and cultural diplomacy towards Moldova: the main strategies

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(Abstract) This research aims to analyse the cultural and energy diplomacy of the EU regarding Moldova. The ongoing war between Russia and Ukraine occurs within the broader framework of regional geopolitical rivalry between the EU and Russia. Moldova, similar to Georgia, Armenia, and other "in-between" states, faces challenges due to the conflicting interests of the two agents, which operate through dissimilar strategies, namely like co-optation and coercion, respectively. Since 2022, Moldova has taken steps to reform its energy sector. However, its only power plant, located in the separatist region of Transnistria, in Cuciurgan, creates a dependency on Transnistrian electricity for about 70% of the country's needs. Russia has used this leverage to keep Transnistria under its protection and destabilise Moldova. In 2025, an energy crisis began when Gazprom suspended supplies to Moldova due to a debt dispute. The EU offered financial help to maintain gas supply during the crisis, using a cooptation power strategy. The paper looks into the EU's current and future plans to counteract Russia's coercive influence. Some examples are the provision of financial support to Moldova to assist with the energy crisis in Transnistria; investing in infrastructure to improve the region's power supply; and fighting against the Russian media. In addition, the EU plans to play the role of a mediator to start genuine dialogue between Chisinau and Tiraspol. In terms of cultural diplomacy, the strategies of the EU germane to its co-optation power include confidence-building measures in cultural areas such as arts, grants and funding to the NGO sector that fosters Moldovan heritage, the promotion of multilingual education and academic exchange, as well as the preservation of historical sites and local cultural landmarks. By comparing the gas diplomacy and cultural diplomacy of the EU in the case of Moldova, we can conclude that the co-optation strategy of the EU includes financial support, the dissemination of values and ideologies, as well as the diffusion of political norms.

From compliance to strategy: how companies turn sustainability into action

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(Abstract) The development of the EU Sustainability Reporting Directive (CSRD) and the European Commission's Omnibus initiative, launched in February, impact companies' practical sustainability development. As existing regulations and laws affect companies' sustainable development, the VALIOT project companies have outlined and considered concrete measures regarding the impacts of sustainable development in practical business. The companies have utilised VRIO, PESTEL, and 8-field analyses to determine the concrete implications of sustainability factors. This article discusses influential and relevant sustainability factors for case companies to meet their stakeholders' current and future demands.

Enhancing Student Participation in International Mobility – Exploring Opportunities for Improved Engagement

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(Abstract) International student mobility has been a cornerstone of higher education policy within the European Union and Hungary for decades, with programs such as Erasmus+ and the Pannónia Scholarship Program providing invaluable opportunities for students to broaden their academic and cultural horizons. These programs have played a key role in fostering intercultural dialogue, strengthening international cooperation, and enhancing students' personal and professional development. Recent trends, however, indicate a shift in student preferences, with a growing interest in shorter, structured mobility opportunities and a declining willingness to participate in semester-long study programs abroad. In light of these developments, this study aims to explore the underlying factors influencing students' mobility decisions and to identify strategies that can enhance the attractiveness and perceived value of longer-term international experiences. The analysis focuses on identifying opportunities for enhancing international mobility through the collaborative efforts of all stakeholders, including policy makers, higher education institutions, academic staff, families, and students themselves. By strengthening partnerships, improving information flow, and ensuring that mobility opportunities are aligned with the evolving needs and expectations of students, the study aims to support the continuous development of mobility programs, making them more accessible, visible, and appealing to all students.

Artificial intelligence-based dataset generation to support control theory modeling

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(Abstract) Limited data availability presents a major challenge in the development of reliable control theory models, particularly for dynamic systems requiring precise parameter tuning. Traditional data augmentation methods, such as bootstrap sampling or Monte Carlo simulations, often fall short when original datasets are small or incomplete. Recent literature highlights the potential of Generative Adversarial Networks (GAN) to generate synthetic data that better captures the variability and complexity of real-world systems. This theoretical review explores the strengths and limitations of classical statistical methods alongside GAN-based approaches, analyzing their suitability for enhancing small datasets in control theory. By comparing methodologies and their underlying assumptions, the review aims to establish a foundation for future AI-assisted data generation techniques, emphasizing their potential to address data scarcity in scientific and industrial applications.

Conceptual design of a web-based fertility probability evaluation system for female infertility

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(Abstract) Female infertility and impaired fecundity represent a growing global challenge, affecting approximately 17.5% of the adult population, with significant medical, psychological, and social implications. Current research focuses on developing a conceptual design for an interactive, web-based evaluation system aimed at estimating individual fertility probability based on a combination of endogenous and exogenous factors. The proposed system integrates hormonal levels, lifestyle data, and health indicators into a multilayered scoring and weighting model. The system's logic calculates a composite fertility score, which is then classified into predefined fertility probability categories. This planned system offers a personalized, evidence-based fertility assessment tool, bridging medical data analysis with user-friendly digital health solutions. Although currently at the design stage, the research highlights the importance of interdisciplinary approaches that combine medical, data science, and user experience elements to support early awareness and informed decision-making for individuals facing fertility challenges.

Physiological and Neurological Factors in Virtual Reality: A Survey-Based Analysis

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(Abstract) Virtual Reality (VR) technology offers immersive, multisensory experiences that have transformative potential across entertainment, education, and professional domains. However, its use is also associated with a range of physiological and neurological responses that remain underexplored in large-scale user populations. This study investigates the prevalence, severity, and predictors of such responses through a survey-based analysis of 205 VR users. Participants completed a structured online questionnaire assessing their VR usage patterns, symptom experiences, and demographic background. Results indicate that the most frequently reported symptoms include nausea, headaches, visual fatigue, and neck discomfort, though these effects were generally mild and infrequent. Psychological symptoms such as anxiety, disorientation, and diminished motivation were reported less often but showed a strong association with higher daily screen exposure. In contrast, demographic factors like age and gender had limited predictive value. Notably, educational background and technical familiarity were linked to more functional and diverse VR use. The findings support prevailing theories of sensory conflict and cognitive overload while highlighting the cumulative role of digital lifestyle in shaping user responses. **Future** research should incorporate objective measurements and stratified sampling to better capture the complex interaction between immersive technology and human neurophysiology.

Rethinking Cybersecurity: How Serverless Architecture Redefines Risk Management

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(Abstract) Serverless computing is reshaping cybersecurity risk management by introducing unique features: such as ephemeral functions, event-driven operations, and a shared responsibility model, challenge traditional security practices. In serverless environments, individual functions execute briefly to complete specific tasks before disappearing, which means that security measures must quickly adapt to protect these short-lived processes rather than relying on monitoring static, long-running systems. Additionally, as serverless applications dynamically respond to events like user actions or data triggers, they create new vulnerabilities that require innovative approaches to threat detection and mitigation. The shared responsibility model further complicates the landscape by dividing security duties between cloud providers, who secure the underlying infrastructure, and organizations, who must manage and safeguard their own code and configurations. This research explores these distinct characteristics to demonstrate why traditional cybersecurity strategies need to be rethought and how updated, agile approaches can protect against the novel threats inherent in this dynamic computing model.

The cloud as seen by SMEs

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(Abstract) This research presents findings from qualitative research on small and medium-sized enterprises' (SMEs) perceptions and adoption of cloud computing. The study explores how SMEs view cloud technologies, their motivations for adoption, and their implementation challenges. Results indicate that while many SMEs recognize the potential benefits of cloud computing, such as cost savings, scalability, and improved collaboration, they also express concerns about data security. The research highlights the need for targeted support to help SMEs navigate the complexities of cloud adoption and strengthen their information security resilience. Key barriers identified include limited technical expertise, financial constraints, and uncertainty about regulatory compliance. The study also reveals that successful cloud adoption among SMEs is often associated with a clear strategic vision, strong leadership support, and a phased implementation approach. By addressing these challenges, SMEs can better leverage cloud technologies to enhance their competitiveness and resilience in an increasingly digital business landscape.

Generation Z security awareness among university students

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(Abstract) The focus of the research is on the cybersecurity awareness of Generation Z. This generation was born into the digital age, and the use of smart devices has been an integral part of their everyday lives since infancy. How well are they able to make conscious decisions to properly protect their digital data? Are they aware of basic cybersecurity methods, do they apply them, and do they have and, if so, what is their level of digital security awareness? After clarifying the concepts, the most important research results regarding cybersecurity activities and conscious use are presented. With this research, I would like to contribute to the prevention and possible defense of cybersecurity attacks, the development of conscious protection activities, and the greater protection of our online data. During the research, I used a quantitative methodology, in the form of a questionnaire survey, with a snowball sampling procedure. Participation in the research was voluntary. Our sample is not representative.

Keywords: Generation Z, cybersecurity, cyber protection, risk analysis

Applying the COPRAS method for metaheuristic algorithm selection: The case of the economic dispatch problem

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(Abstract) In recent literature, an increasing number of metaheuristic algorithms have been proposed for solving individual optimization problems. One such complex problem, widely studied and addressed with various algorithms, is the economic dispatch problem. Hence, this paper aims to establish a systematic approach for selecting the most suitable metaheuristic algorithm by employing the COPRAS (COmplex PRoportional ASsessment) method, a multi-criteria decision-making (MCDM) technique. The proposed methodology is applied to evaluate and rank five metaheuristic algorithms (MSA, FA, PSO, PSOGSA, and PSOCGSA) across four variants of the economic dispatch problem. The assessment considers multiple performance metrics, including best-obtained results, standard deviation, mean values, error rates, computation time, and convergence behaviour. To ensure the reliability of the ranking, the results were further validated using the EDAS method, confirming the robustness of the selection process. This study provides a structured framework for algorithm recommendation, aiding researchers and practitioners in choosing the most effective optimization approach for similar complex problems.

Keywords: metaheuristics, economic dispatch, MCDM, COPRAS method, EDAS method

Case Studies of Cybersecurity Implementation in Leading Digital Payment Platforms

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(Abstract) This study explores the impact of cybersecurity on digital payments, specifically examining how cyberattacks affect these systems. Using a case study approach and analyzing existing cybersecurity reports and academic research, the study reveals that while platforms like Alibaba and Revolut employ robust security measures like encryption and access control, they still struggle to effectively counter cyber threats. The research highlights the crucial role of both technological solutions and ongoing user education in strengthening digital payment security. These findings offer insights for digital payment platforms seeking to improve their cybersecurity strategies and user engagement to ensure transaction security and reliability. However, the reliance on publicly available data and literature may limit the study's scope, as it may not capture the full range of unpublished cybersecurity challenges faced by these platforms.

The Impact of ICT Infrastructure on Hungarian SMEs: A Financial Perspective

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(Abstract) This research investigates whether the use of ICT infrastructure is reflected in the accounting reports of small and medium-sized enterprises (SMEs) in Hungary. The study aims to provide a solid accounting foundation for decision-making between traditional **ICT** infrastructure and cloud-based Furthermore, the collected data is essential for assessing the marginal cost-benefit analysis of these investments. The analysis is based on a survey of 498 SMEs, examining key financial indicators and the impact of ICT adoption on business performance. The findings provide insights into how ICT investments influence accounting data, supporting strategic financial decisions in SME digitalization. Additionally, the study discusses the readiness of accounting systems for Industry 4.0, highlighting potential areas for development. The results contribute to a more structured approach to digital transformation in the SME sector, assisting both business leaders and policymakers in fostering technological advancement.

The Impact of ICT Infrastructure on Revenue Growth in Hungarian SMEs

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(Abstract) This study examines whether the use of ICT infrastructure is reflected in the accounting reports of Hungarian small and medium-sized enterprises (SMEs), with a particular focus on revenue and profit. The research aims to provide an accounting-based foundation for decision-making regarding the implementation of various ICT infrastructure elements. Additionally, the data collected is essential for conducting a marginal cost-benefit analysis, with an emphasis on marginal benefits. The analysis is based on a survey of 498 SMEs, assessing the correlation between ICT adoption and financial performance indicators. The findings contribute to a deeper understanding of how digital infrastructure investments influence business profitability, offering valuable insights for SME leaders and policymakers. By highlighting the financial impact of ICT, the study supports informed strategic planning and the effective allocation of digital resources in the SME sector.

The Realitiyes of Art Misconceptions in Ghana

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(Abstract) Art is a way of life (Bauman, Z. 2013) that embodies freedom of self-belief and a way to make meaning of life. Art is an integral part of everyday life. Unfortunately, the regularity of these daily creative decisions has contributed to why many disregard art or do not perceive it as a respectable career. The creative arts industry has been a low-hanging fruit for many economies worldwide, with very little attention given to its vast potential, especially on the African continent. Failure to recognise and pursue art's social, cultural and economic value has been daunting on the African continent. The research has shown that the study of art in senior high schools in Ghana is second to all other subjects. The warped perception (misconception) of people pursuing art programs, especially students in high school, has a long-term effect on the country's development. The research collected critical data from three (3) stakeholders (students, institutions and guardians) in the southern parts of Ghana (Accra and Cape Coast). The data analysis reveals the sources of this misconception and its effect. A significant ratio of art-based humiliation (misconception) suffered by art students comes from their peers (non-art students), followed by institutions (system and structures) and guardians. The thesis revealed that educational reforms and deliberate exposure of art knowledge to the research stakeholders could help build a perfect synergy of positive perception of arts leading to a robust creative economy in Africa.

Understanding the Second-hand Clothing Market and its impact on Ghana

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(Abstract) The global second-hand clothing (SHC) market has experienced rapid growth, fuelled by fast fashion, evolving consumer preferences toward sustainable fashion and economic affordability. Key drivers behind this growth include heightened environmental awareness, economic pressures, and the adoption of a "circular economy" mindset, where reusing goods is increasingly prioritised by many consumer groups over new single-use consumption. The SHC market creates avenues for increased access to affordable clothing for low-income communities, supports informal job creation in buying, selling, repairing, and altering garments, and promotes sustainable practices aligned with circular economy principles.

Research from the Swiss Academy for Development in 1997 indicated that over 95% of Ghanaians consume or patronise second-hand clothing, demonstrating its pivotal role in the apparel market. Similarly, a study by Oteng-Ababio et al. identified the Kantamanto Market in Accra as a central hub for the second-hand clothing industry in Ghana and neighbouring countries (Oteng Ababio, 2015). This local study aims to develop a more robust understanding of how resale, repair, and preparation for reuse operate in Ghana and map the adverse impacts associated with the importation of second-hand clothing. The study also evaluates awareness of policy and regulation within the SHC industry.

This study was conducted through Project Rewear, initiated by Fashion For Good (FFG) and Circle Economy (CE) in partnership with The Revival Earth and Artdiction. Project Rewear focuses on the current and desired future state for resale end destinations like

Kantamanto, per product archetype (Denim Jeans, Outerwear, Tshirts, Activewear, Sweatshirts or Jumpers) by looking at rewearable and low-value rewearables, and identifying the resale and repair potential of garments in four select European regions: Lithuania (Nordic/Baltic), the Netherlands (Western), Poland (Central-Eastern), and Spain (Southern Europe).

Responsible recruitment practices enhancing social responsibility in SMEs

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(Abstract) Economic and environmental dimensions of responsibility have received much scholarly attention and have been widely utilized in educational programs. However, social responsibility has received limited attention. Additionally, practical measures of social responsibility have not been utilized in the competence development of SMEs and the impact of recruitment on enhancing social responsibility has not been widely recognized. Responsible recruitment is increasingly relevant in Finland. The emphasis on equality, diversity, and inclusion aligns with societal values. Legislative changes and increased stakeholder awareness further increase its importance. Our study is based on a project, in which Laurea and LAB UAS created CSR courses for Finnish SMEs. We explore the connection of responsible recruitment and social responsibility of SMEs, describe its key elements and provide practical implications and feedback of SMEs.

Blokklánc-technológia alkalmazásának lehetősége az egyetemi oktatásban

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(Abstract) Modern oktatási módszerek nélkül hatékony egyetemi oktatást nem lehet megvalósítani. Az elektronikus tananyagokat általában a felhőben szokták feltölteni az oktatási intézmények, ahonnan azokat a hallgatók könnyedén letölthetik. Okos eszközök alkalmazása által a tananyagok így szinte bárhonnan könnyedén hozzáférhetővé válnak. Sajnálatos módon azonban a felhő alapú tárhelyek nem nyújtanak kellő védelmet, mivel számos múltbéli esetben kompromittálódtak érzékeny adatok. Ebből kifolyólag a kutatás célja, hogy létrehozzon egy olyan adattárolásra alkalmas megoldást, amely megoldást nyújt a néha alacsony biztonsági szinttel felhőalapú adattárolás helyett. A decentralizált rendelkező blokklánctechnológia alkalmazása által a kutatás gyakorlati részeként egy privát hozzáférésű egyetemi blokklánc kerül létrehozásra, ahol az egyetemi adatok biztonságosan tárolása megvalósítható, akár hosszútávon is. Egyetlen-egy egyetemnek sem célja, hogy érzékeny hallgatói adatok kerüljenek illetéktelen személyek tulajdonába, hiszen ez által az oktatási intézmény jó hírneve sérülhet. Az egyetemi blokklánc létrehozása előtt megvizsgálásra kerül az is, hogy melyik blokklánc technológia nyújtja a legnagyobb adatbázisbiztonságot, majd pedig ennek kiválasztása után kerül sor a tényleges privát egyetemi blokklánc létrehozására.

AI a hallgatói életben: Két szak hallgatóinak összehasonlító elemzése az Óbudai Egyetemen

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(Abstract) A tanulmány az Óbudai Egyetem Keleti Károly Gazdasági Kar nappali tagozatos gazdasági informatikus és kereskedelem és marketing szakos hallgatóinak a mesterséges intelligenciához való viszonyát vizsgálja. Azt feltételezzük, hogy az informatika iránt gazdasági informatikus szakos iobban érdeklődő nyitottabbak a mesterséges intelligencia, annak szolgáltatásai iránt. A kutatás során kvantitatív módszert alkalmaztunk, online kérdőívek segítségével gyűjtöttünk adatokat, hogy átfogó képet kapjunk a hallgatók mesterséges intelligencia használatáról, motivációjukról és kihívásairól. A tanulmányból kiderül, hogy a vizsgált két szak, egymástól elkülöníthető csoportot alkot-e a mesterséges intelligencia megítélése vonatkozásában. Továbbá a tanulmány összefoglalja a hallgatók szokásait a mesterséges intelligencia használatának terén, megismerjük milyen gyakran, mely szolgáltatásokat, mire használják a hallgatók. Láthatjuk továbbá, hogy a válaszadók hogyan vélekednek a mesterséges intelligencia adta lehetőségekről, azok vélt vagy létező veszélyeiről és hogyan látják a mesterséges intelligencia tanulmányaira, jövőbeni munkájukra gyakorolt hatását.

A művészet hatása a fogyatékkal élők biztonságára

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(Abstract) A fogyatékkal élők biztonságának komplex, többdimenziós vizsgálata estén megállapítható, hogy a művészet további speciális lehetőséget nyújt számukra az adott szempontból. Történetiségében tekintve, már az egészen kezdeti koroktól megjelenik egyrészt a fogyatékosság ábrázolása a művészetben, másrészt később a fogyatékkal élők közül számtalan kiváló nemzetközileg elismert művész található. A XXI. századi (2024-es) kutatás a hazai kortárs művészeket vizsgálja, hogyan növeli biztonságukat a művészet léte, valamint megélése annak különböző aspektusaiban.

Ki tudja támogatni az önvezető katonai járművek bevezetését?

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(Abstract) Jelen tanulmány célja az önvezető járművekkel kapcsolatos attitűdök feltérképezése nyolc kulcskérdés mentén, amelyek a technológia kihívásait, a kockázatok megítélését, valamint a lehetséges polgári és katonai felhasználást vizsgálták. Az eredmények azt mutatják, hogy az önvezető autók kiberbiztonságába vetett bizalom erősen korrelál az új technológiáktól való félelemmel, a magánélet védelmével kapcsolatos aggályokkal és a kudarctól való félelemmel. Az önvezető technológiával szemben bizalommal rendelkező válaszadók nyitottabbak a katonai alkalmazásokra, míg a bizalmatlanok nagyobb aggodalmakat táplálnak ellenőrizhetőséggel kapcsolatban. A klaszterelemzés az attitűdök három különböző klasztert azonosított: negatív megítélés, óvatosan nyitott és technológiabarát. Az eredmények rávilágítanak a bizalmi minták sokféleségére, és hozzájárulnak az autonóm járművek társadalmi elfogadottságának jobb megértéséhez.

Keywords: autonóm járművek, kiberbiztonság, katonai alkalmazások, szabályozás, terrorizmus kockázata

Informatics and Its Impact on Financial Inclusion

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(Abstract) Financial inclusion, the process of ensuring that individuals and businesses have access to useful and affordable financial products and services, has been significantly influenced by advancements in informatics. This paper explores the role of informatics in enhancing financial inclusion, focusing on digital banking, big data, blockchain technology, artificial intelligence (AI), cloud computing, and cybersecurity. It also examines the challenges associated with technological advancements and suggests potential strategies to further leverage informatics for inclusive financial growth.

Recent incidents in Smart Phone security and concerns for BYOD

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(Abstract) The increasing adoption of Bring Your Own Device (BYOD) policies has led to a significant shift in how organizations manage security, particularly with the widespread use of smartphones. This paper investigates recent smartphone security incidents from the past five years, highlighting their impact on BYOD environments. This study examines various security breaches involving mobile devices, including data theft, malware infections, and unauthorized access to corporate networks. These incidents underscore the critical need for stringent security measures and regulatory compliance in BYOD policies. The paper discusses the vulnerabilities inherent in smartphones, such as insufficient device encryption, the exploitation of unpatched software, and the risks posed by third-party apps. Furthermore, it analyzes how organizations can mitigate these risks by implementing robust security protocols, employee training, and policy frameworks that align with best practices for mobile device management.

Speech Identification for Remote Assessments: Age and Gender Recognition in Distance Learning

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(Abstract) Ensuring the authenticity of student identities in online education remains a critical challenge, particularly in remote assessments. With the rapid growth of Internet-based examination systems, there is an increasing need for robust identity verification methods. This study explores the application of speech-based age and gender recognition to enhance security in online learning and examination platforms. We employ deep speaker embedding techniques, leveraging state-of-the-art speaker verification models such as x-vector, ECAPA-TDNN, and ResNet to extract and analyze speaker identity attributes. Using publicly available speech datasets, we evaluate the models' effectiveness in age and gender classification. demonstrating their potential in mitigating impersonation risks and improving exam proctoring security. Our findings highlight that integrating automatic speaker recognition can enhance identity verification in digital education environments while maintaining a seamless student experience. This research contributes to the advancement of biometric security in remote learning by assessing the feasibility of speech-based authentication for online assessments.

Trends in the use of marketing controlling among small and medium-sized enterprises

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(Abstract) The role of small and medium-sized enterprises is critical in the economy. Their role and weight are significant, but their effectiveness is not comparable to large firms. Much more restrained marketing activities and even less in terms of controlling assets activity. In my research, I examined whether SMEs have made improvement in their marketing activities in terms of the use of planning, measurement and analysis tools. The study was based on a multi-year research over several years, comparing the results of samples taken over several periods with each other.

Transforming Learning: Digital Platforms and Their Effect on Student Engagement and Learning Outcomes

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(Abstract) In response to the rapid proliferation of digital learning platforms within contemporary educational landscapes, investigation aimed to determine their influence on student motivation and learning outcomes, ultimately providing actionable recommendations for improvement. Recognizing the transformative potential of these platforms, which encompass online courses, virtual classrooms, and educational applications, this study employed a questionnaire survey to gather insights from students and self-learners regarding their experiences, perceived learning outcomes, and motivational shifts. Utilizing this methodology, the research revealed a predominantly positive correlation between the use of digital learning platforms and enhanced learning outcomes and motivation, attributed to increased access to resources and interactive learning opportunities. However, the survey also highlighted concerns related to course design, quality, and recognition, indicating potential limitations. Consequently, the study concludes that while digital learning platforms (in this case MOOCs) demonstrably contribute to improved student engagement and achievement, optimizing course design and multimedia content, enhancing overall quality and recognition, and implementing personalized learning pathways are crucial for addressing identified challenges and maximizing the effectiveness of these platforms in the digital age.

The role of security - effects of cognitivebased and emotional trust

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(Abstract) The basis of all communication is security and trust. This study aims to be a secondary research summarizing scientific articles and research investigating effective organizational communication. Effective organizational communication is important, among other relevant factors, in terms of the quality of life of the employees in the organization, in terms of the organization's partner relationships, and in the issue of adapting to continuous changes. Effective organizational communication enables people to interpret reality together, summarizing individual interpretations.

Leading with mindfulness: how practice shapes values and decision-making

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(Abstract) Mindfulness is the practice of focusing on the present moment with non-judgmental awareness. Over the past few decades, it has gained significant popularity in Western society, largely influenced by positive psychology, as research has demonstrated its effectiveness in reducing stress, anxiety, and depression. Today, we increasingly recognize the importance of mindfulness across various domains, including the business world. Numerous international studies highlight its benefits at individual, group, organizational, and market levels. In the workplace, mindfulness training fosters emotional intelligence and enhances team dynamics. More than just a stress management tool, mindfulness is a way of life that strengthens managers' self-awareness, sense of responsibility, and the quality of their relationships. The aim of this paper is to examine whether the practice of mindfulness has a deeper impact on leaders, influencing their values and priorities.

IT Vulnerabilities and Cyber Security Strategies in Industrial Networking and Robotics Systems

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(Abstract) In recent years, the convergence of industrial automation and information technology has significantly increased the complexity and vulnerability of industrial control systems (ICS). This study provides a comprehensive analysis of the cybersecurity vulnerabilities inherent in industrial IT elements, with a particular focus on network infrastructure and robotic systems. Through realworld case studies and technical assessments, the paper identifies key threat vectors, including remote access misconfigurations, outdated firmware, unencrypted protocols, and social engineering attacks. It further explores systematic methods of vulnerability assessment, such as passive and active network analysis, physical and logical security audits, and automated vulnerability scanning tools. The study also emphasizes the role of international standards and regulations—such as IEC 62443, ISO/IEC 27001, and the NIS2 Directive—in strengthening industrial cybersecurity. Additionally, it presents effective defensive strategies, including network segmentation, multi-factor authentication, SIEM integration, and the application of ITIL-based governance frameworks. The findings highlight the urgent need for continuous monitoring, targeted training, and proactive security architecture to ensure the resilience and operational continuity of industrial environments in the face of evolving cyber threats.

Keywords: Industrial Cybersecurity; Vulnerability Assessment; SCADA and ICS Security; Robot Systems; Critical Infrastructure Protection

Soft Skill Management in Academic Environment in the Service of Enhancing Well-being

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(Abstract) Having gained experience in technical higher education and institutional research – also as professional consultants – and recognizing the need for student and researcher satisfaction and skill development, the focus of the research area became crucial for examining the existing engineering-research competence and enhancing the related basic abilities, soft skills. The main goal is to contribute and make suggestions for the retention and improvement of the well-being of students and young researchers in higher education and research institute with the active participation of the management, which strengthens their commitment, enhances their mental and spiritual health, and their research performance with regard to the social acceptance of the research. As an empirical approach, relevant research-engineering soft skill sessions are

organized and conducted in line with the external and internal expectations of engineering education and research mainly along the following topics: increasing the cohesion of student and research group, insights into the specifics of human relationships experienced in everyday work activities with self-knowledge perceptions in private life as well, special attention to the prominent role of time, the importance and management of stress, identification of goals and motivation.

Questions regarding the support of autonomous vehicles

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(Abstract) The aim of this study is to explore societal attitudes towards self-driving vehicles along eight key themes, which focused on the challenges of the technology, risk perception, and potential civil and military applications. The results of the analysis suggest that trust in cybersecurity is closely related to fear of new technologies, privacy concerns and anxiety about the possibility of technological failure. More confident respondents are more open to military applications, while more distrustful respondents express a greater need for control and auditability. The cluster analysis identified three distinct clusters of attitudes: negative, cautiously open and technology friendly. The results shed light on the heterogeneity of trust attitudes and provide an important empirical basis for a deeper understanding of the social acceptance of autonomous vehicles.

Board Gender Diversity and ESG Disclosure in V4 Countries

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(Abstract) The study examines the relationship between board gender diversity and ESG disclosure in publicly listed companies in Visegrád Group (V4) countries. It aims to investigate whether a higher representation of women on corporate boards drives companies to disclose more environmental, social, and governance (ESG) practices. Using 642 firm-year observations from 2012 to 2021, the regression analysis reveals a statistically significant and positive association between gender diversity on corporate boards and ESG disclosure in V4 countries. A higher representation of women on boards is correlated with increased transparency and disclosure regarding ESG issues. This finding suggests that gender diversity is crucial in shaping companies' decisions to disclose their sustainability practices in V4 countries, potentially reflecting a broader commitment to social responsibility and transparency.

Exploring the relationship between fintech by Google search and bank stability: Evidence from Vietnam

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(Abstract) Due to the ongoing global debate regarding the relationship between fintech and banks, including developing countries, this study aims to investigate this relationship in the case of Vietnam, an emerging nation. Using a sample of 27 Vietnamese commercial banks from 2012 to 2023, we construct a fintech index tailored to the Vietnamese banking industry based on data from Google Trends. This index reveals substantial growth in fintech adoption within the Vietnamese banking sector over the study period. Our empirical analysis demonstrates a significant inverted U-shaped relationship between fintech development and bank stability. At moderate levels, fintech adoption positively contributes to bank stability; however, when fintech adoption becomes extensive, it introduces risks that may offset these stability benefits. This study provides important insights for bank managers, investors, and policymakers seeking to optimize fintech integration for sustainable banking stability.